NDIA Systems Engineering Conference

The MUOS Needs SNMP

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The Mobile User Objective System (MUOS) Needs SNMP

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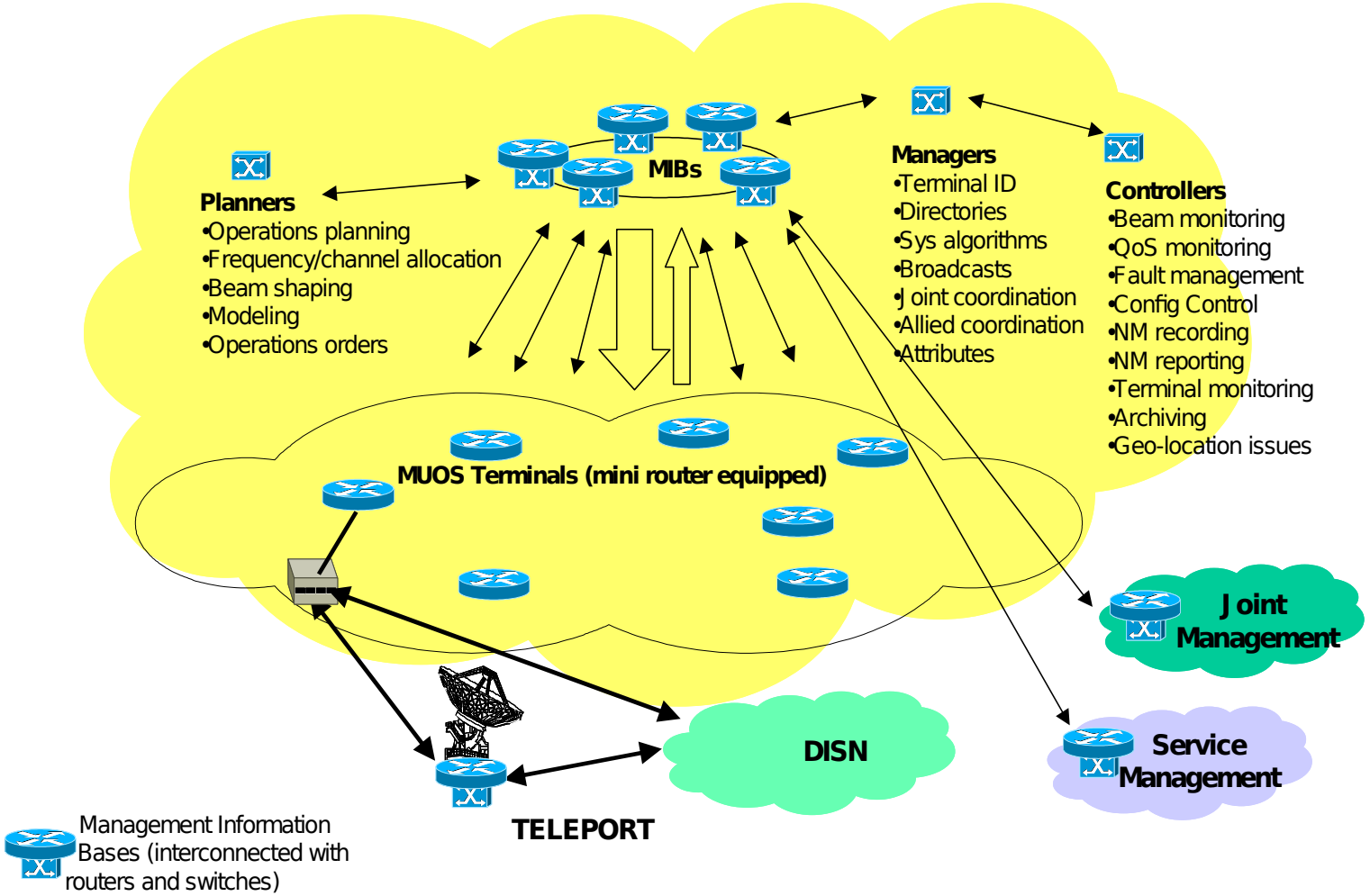
Network Management Overview



Performance

Type	Requirement
Capacity	The MUOS is being built with a world wide Capacity requirement of 1997 accesses wor And a data rate of 39.2 Mbps. The capacity In a single Theater of Operations is 9.8 Mbp
Access & Control	The MUOS must have the capability to dyna Reconfigure networks within 5 minutes. Fee Must be delivered to some users in 6 second Survival messages must be delivered in 5 se
Availability	The MUOS must have an operational link availability of 97%

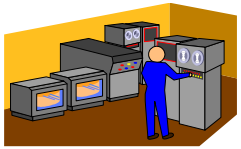
SNMP Message Set

Type	Purpose
Get-Request	To retrieve information from a network device that has an SNMP agent
Get-Response	Provide a response from the SNMP ag an SNMP station
Get-Next-Request	To retrieve the next specific object fro table in lexigraphical order
Set-Request	To remotely configure parameters on a device
InformRequest	Provide mgr-to-mgr communications
GetBulkRequest	Request multiple retrievals of an objec (Get-Next-Request asking for multiple #

SNMP Trap Types

Type	Indication
Coldstart of a system	Agent is reinitializing itself since its configuration has changed
Warmstart of a system	Agent is reinitializing itself but its configuration has not changed
Link down	Link failure
Link up	Link restoral
Failure of Authentication	Request does not have proper authenticatio e.g., wrong SNMP community string
EGP neighbor loss	Exterior Gateway protocol neighbor gone
Enterprise specific	Specific to vendor implementing it

Baseline Satellites



Deployed Database of Databases

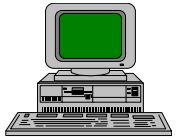
Deployment Planning Tool

Command Center Managers

Controllers

Joint Network Management System

Infrastructure Database of Databases



Worldwide Planning Tool

Command Center Managers

Controllers

Integrated Network Management System

Backup Viewgraphs

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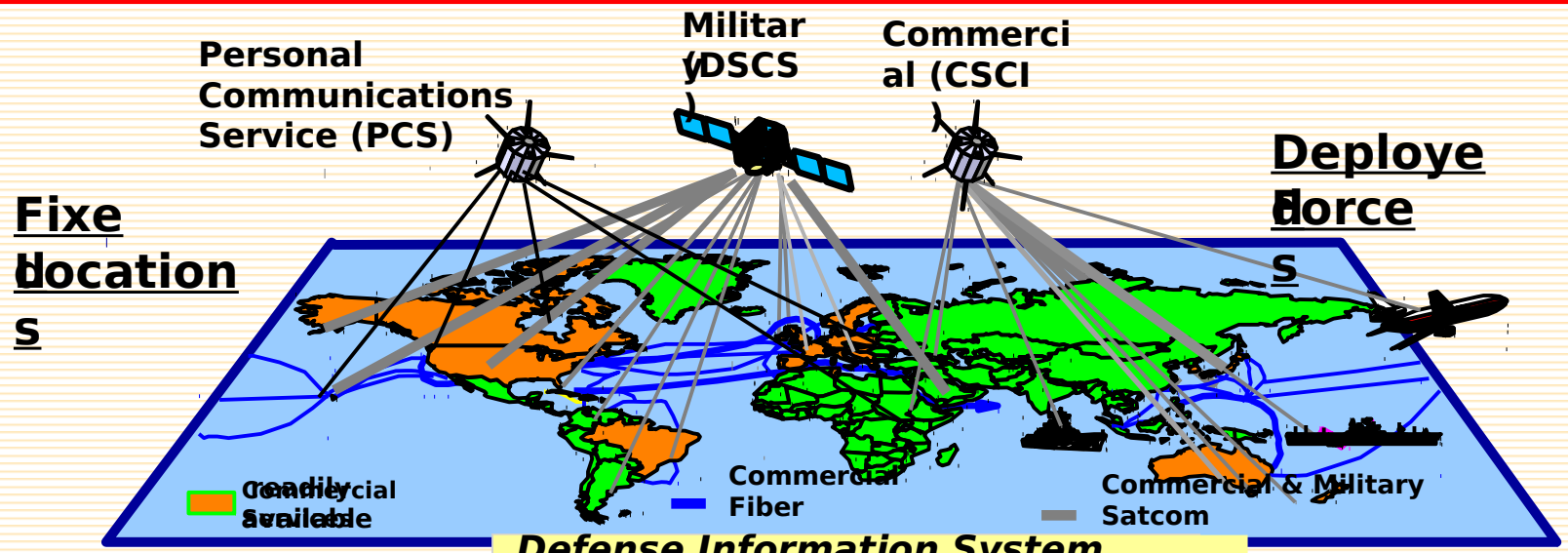
Control Components



Defense Information System Network **SEAMLESS INTEGRATION**

Goal - Fully Meshed Network